

## Abstracts

A149

**OBJECTIVES:** Donabedian described client satisfaction as “the ultimate validator” of quality in health care. Identify items in the Medicare Current Beneficiary Survey (MCBS)—2002 as measured by satisfaction regarding health care access that correlate with satisfaction with quality of care. This is the first step in developing a new model that relates health care access to health care quality as measured by consumer/patient satisfaction. **METHODS:** Access items from the survey were measured by a 4-point satisfaction scale: 1 = very satisfied to 4 = very dissatisfied. Only responses on the 1 to 4 scale were used; all other responses or non-responses were considered as missing data. The missing data then were imputed employing the EM algorithm; complete cases were used in the analysis (N = 16,087). A linear regression model by weighted least squares using the one-year cross-sectional weights from the MCBS is done using items in the survey, measured by satisfaction, that correspond to Penchansky and Thomas’ five dimensions of health care access—accessibility, acceptability, accommodation, affordability, and availability— and are regressed on the dependent variable MCQUALITY (satisfaction with medical care received in last year). **RESULTS:** The regression model identified sixteen of 20 eligible items that significantly correlated ( $p < 0.05$ ) to satisfaction with quality of care in the Medicare population of 2002. **CONCLUSIONS:** Health care access and quality of care as measured by satisfaction have significant correlation in the Medicare population.

PHPI6

**THE IMPACT OF THE PHARMACY AND THERAPEUTICS COMMITTEE ON THE PATIENTS’ ACCESS TO PRESCRIPTION DRUGS IN THE SAUDI MINISTRY OF HEALTH: EXPLORATORY AND COMPARISON STUDY**

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The Saudi Arabian Ministry of Health (MOH) controls the utilization of the free pharmacy benefit program (PBP) by having a closed universal formulary and ensures the effectiveness of the PBP by instituting a pharmacy & therapeutics (P&T) committee in each hospital. **OBJECTIVES:** To test the relationship among the levels of development P&T committees and patients’ access rates to prescription drugs. **METHODS:** A cross-sectional descriptive survey design was conducted in the first phase and covered 127 MOH pharmacy managers at non-specialized hospitals. The survey gathered information about: hospital, pharmacy, and P&T committee characteristics. The survey results were used to classify the MOH hospitals according to the levels of development of the P&T committee. In the second phase, the prescription audit phase, hospitals deliberately were selected based on the hospitals’ P&T committee levels of development. From each hospital, 150 patient records were systematically sampled and patient’s access rate was calculated for each patient. Analysis of variance (ANOVA) was used to test the existence of a significant difference in the access rates across the levels of development of P&T committee. **RESULTS:** Of 127 MOH hospitals, 81 (63.7%) hospitals were valid for the analysis. Of 81 hospitals, 13, 24, 39, 5 hospitals have undeveloped, poorly, partially, and developed P&T committees, respectively. A total of 6885 prescription drugs were prescribed for 2850 patients in 19 audited hospitals. The overall rate for patients’ access was 97.3%. The ANOVA tests for the existence of a significant difference of access rates across the levels of development of P&T committee showed mixed results. **CONCLUSIONS:** The positive relationship between the levels of development of P&T commit-

tee and patient’s access to prescription drugs was not conclusive. However, the finding might be due to lack of enough data and controls of other confounding variables rather than inexistence of the relationship.

PHPI7

**IMPACT OF CO-PAY DIFFERENTIAL ON GENERIC PRESCRIPTIONS FILLED THROUGH 90-DAY RETAIL CHANNEL**

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**OBJECTIVES:** A newly developed 90-day retail-dispensing program allows members to obtain 90-day supplies of maintenance medications through a retail pharmacy stores at a discount co-payment. The objective of this study is to investigate if there is any relationship between generic utilization observed in prescriptions dispensed through this channel and members’ co-pay difference between brand and generic medications. **METHODS:** The analysis was conducted using pharmacy claim data obtained from a pharmacy benefit management organization. Clients included in the analysis were those who implemented the 90-day retail program from January 2004 to July 2004 and also allowed its members to obtain prescriptions through both 90-day mail and 30-day retail channels. The relationship between generic utilization and co-pay structure was assessed using multiple regression analysis. The dependent variable was proportion of generic prescription claims dispensed through 90-day retail channel. The independent variables were ratio of brand to generic cost, the absolute co-pay amount difference between brand and generic medications, age, gender, and prior generic utilization of 90-day mail as well as 30-day retail program. **RESULTS:** A total of 25 clients were included in the analysis. In 90-day retail program, the generic utilization ranged from 21.5% to 77.5%, ratio of brand to generic cost varied from 1.9 to 6.2, and absolute co-pay amount difference between brand and generic medications varied from \$11.2 to \$101.5. A linear, positive relationship was observed between generic utilization and ratio of brand to generic cost ( $P < 0.05$ ). Previous 90-day mail generic utilization was also found to have positive impact on the 90-day retail generic utilization ( $P < 0.05$ ). **CONCLUSIONS:** Study results indicate an increase in co-pay difference between brand and generic medications do have a positive impact on 90-day retail generic utilization. Further investigation is needed to test the relationship between co-pay structure and generic utilization among different channels.

PHPI8

**IMPACT OF STEPS (SAFE, THERAPEUTIC AND ECONOMIC PHARMACEUTICAL SELECTION) MODEL ON PRESCRIBING COSTS OF STATINS**

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**OBJECTIVE:** STEPS is a structured model for the selection of drugs for formulary inclusion. The aim of this study was to use the STEPS model in the selection of statin products for use within a health board in Northern Ireland. **METHODS:** The STEPS model involved three phases in sequence: an evidence based pharmacotherapeutic evaluation of all available statin drug entities in the UK, a separate safety/risk assessment analysis of product lines of drug entities which exceeded the pharmacotherapeutic threshold and finally a budget impact analysis. A

comprehensive literature review, with expert panel judgment, informed the selection of criteria (and their relative weighting) for the pharmacotherapeutic evaluation. The resultant scoring system was circulated (in questionnaire format) to prescribers and stakeholders for comment. Based on statistical analysis of the latter survey results, the final scoring system was developed. Drug entities which exceeded the evidence threshold score were entered into a tendering process with pharmaceutical suppliers. Product lines submitted as a result of the tendering process were sequentially entered into the second and third phases of the STEPS process (safety/risk assessment; budget impact analysis). **RESULTS:** Three drug entities (from the 5 currently available in the UK) exceeded the evidence threshold and 29 from 39 submitted product lines, containing these drug entities, satisfied the safety evaluation/risk assessment criteria. Two product lines, each containing a different drug entity, were selected for formula inclusion as a result of the budget impact analysis. The estimated annual cost savings for statins as a result of this selection process (based on estimated annual usage in Defined Daily Doses) in this health board, was 40%. **CONCLUSION:** The STEPS model has a significant contribution to make in containing statin costs while retaining the most therapeutically appropriate agents.

#### PHP19

##### **COST SAVINGS ASSOCIATED WITH TABLET SPLITTING PROGRAM IN A PHARMACY BENEFIT MANAGEMENT SETTING**

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**OBJECTIVES:** The purpose of the study is to evaluate the impact of a tablet splitting program in a large pharmacy benefit management organization on the costs and utilization of prescription drugs. **METHODS:** Using a retrospective cohort study design, prescription records from January 1, 2005 to June 30, 2005 were obtained from a pharmacy claims database. Three study cohorts—voluntary, mandatory, and control cohort were created based on the enrollment status in the tablet splitting program. The number of prescriptions dispensed, the total costs and savings per prescription were analyzed and compared for the study drugs Lexapro, Lipitor, and Zoloft. **RESULTS:** A total of 606,068 prescriptions, 594,825 in the control, 5226 in the mandatory and 6017 in the voluntary cohort were included. Total cost savings were obtained by subtracting the difference in cost/days supply between drugs in the control group and each active treatment group. Total cost savings are at \$179,575.85 and \$74,119.53 for the mandatory and the voluntary cohort respectively after adjusting for the operation costs and subtracting the costs from the treatment cohorts. An average per prescription cost saving of \$34.36 for the mandatory and \$12.31 for the voluntary program was realized for the three drugs studied. **CONCLUSIONS:** A tablet splitting program has been shown to produce significant savings, \$34.36 and \$12.31 per prescription for the health plan enrolled in the mandatory and voluntary programs respectively.

#### PHP20

##### **ISPOR CONTRIBUTED RESEARCH 1998–2005: EVALUATION OF TRENDS & QUALITY INDICATORS**

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**OBJECTIVES:** The purpose of this study was to perform a longitudinal content analysis to assess trends in contributed research papers presented at ISPOR Annual Meetings and European Con-

gresses from 1998 through 2005 as available in the ISPOR Research Digest at [www.ispor.org](http://www.ispor.org), as well as to assess research quality indicators. **METHODS:** The database of 5852 contributed presentations at the ISPOR meetings from 1998 through 2005 were analyzed for trends and quality indicators. Trends were evaluated for outcomes assessed (clinical, economic, patient-reported outcomes), and types of health policy and diseases studied. Quality indicators were defined as abstracts including “study perspective”, “discounting”, or “statistical considerations” (“confidence interval”, “standard deviation”, “mean/median”, “sensitivity analysis”). **RESULTS:** ISPOR held 16 international meetings during 1998–2005. The annual number of contributed research presentations increased from 270 to 1248 for an eight-year total of 5852 with all topics and disease categories increasing over time. The major topic areas covered were cost (42%), patient-reported outcomes including methods (23%), health policy (23%), methods and concepts (10%), and clinical outcomes evaluations (6.4%). The top four diseases (4992 disease-specified papers) were neurological/mental health (18.5%), cardiovascular (17%), cancer (9%), and infectious diseases (10%). With respect to quality indicators, a study perspective was mentioned in 18% (37% cost studies, & all others ~4% each); discounting in 8% (16% cost studies & all others <2% each). For statistical considerations, the percent mentioning mean, median, standard-deviation, confidence intervals, or sensitivity analysis (12%), was 41%. Overall, the percent of abstracts with these quality indicators generally increased over the study period. **CONCLUSION:** The number of papers has increased over the study period for multiple topics and diseases. Although the general quality of papers, as considered in this analysis, was increasing, the percent of papers that include these quality indicators needs further evaluation & improvement.

#### PHP21

##### **CALCULATION OF LORENZ CONCENTRATION CURVES AND GINI COEFFICIENT OF HEALTH EXPENDITURES IN HUNGARY**

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**OBJECTIVE:** The aim of the study to calculate the Lorenz concentration curves and Gini coefficient of health expenditures in Hungary. **METHODS:** Data derived from the financial database of the Hungarian National Health Insurance Fund Administration, covering the period 2000–2004. The Hungarian health care financing system based on a regular patient level data reporting system which allows us to calculate the cumulative frequency distributions of health expenditures. In each type of care we put the patients into 100 percentile group ranked by the health expenditures. **RESULTS:** The top quadrant (top 25%) of the patients (with highest health expenditures) received different portion of health expenditures (2004): 72.4% in out-patient care, 64.1% in in-patient care, 67.3% in chronic care, 56.3% in CT/MRI examinations, 56.2% in home care, 46.1% in renal dialysis, 83.8% in drug reimbursement, 83.6% in medical devices reimbursement. The visual Lorenz curves are presented for each type of care mentioned earlier and for the five years between 2000–2004. There was not any significant time trend within the same type of care. We found the following Gini coefficients (2004): out-patient care: 0.6352, in-patient care: 0.5278, chronic care: 0.5624, CT/MRI examinations: 0.4459, home care: 0.4319, renal dialysis: 0.4251, drug reimbursement: 0.7444, medical devices reimbursement: 0.7480. We found significant